

Title (en)
Curing machine for pneumatic tires

Title (de)
Reifenvulkanisiervorrichtung

Title (fr)
Appareil de vulcanisation de pneus

Publication
EP 1036646 A3 20010321 (EN)

Application
EP 00302088 A 20000315

Priority
• JP 7035399 A 19990316
• JP 2000036263 A 20000215

Abstract (en)
[origin: EP1036646A2] A curing machine for pneumatic tires includes a bladder (4) which is tightly held by upper and lower bladder rings (2,3), a vertically movable center post (1) for holding the upper bladder ring (2), and an outer cylinder (5) arranged on a radially outer side of the center post, for supplying a pressurized heat medium into the interior of a green tire. An upper lock mechanism (6) is associated with the top end portion (1-2) of the center post (1) and serves to automatically lock the upper bladder ring (2) in place after the top end portion of the center post has been moved upwards and passed through a center through hole (2ah) in the upper bladder ring. A lower lock mechanism (10-16) serves to automatically lock and unlock the lower bladder ring (3), in which a lock region (10) extending downwards from the lower bladder ring (3) is engaged with, and disengaged from a first lock member (13) secured to the outer cylinder (5) by vertically moving a second lock member (15) in opposite directions. The upper and lower lock mechanisms can be operated simultaneously, so that the exchange of the bladders can be performed highly efficiently, in a simplified manner and within a minimized time. <IMAGE>

IPC 1-7
B29D 30/06

IPC 8 full level
B29C 33/02 (2006.01); **B29C 35/02** (2006.01); **B29D 30/06** (2006.01)

CPC (source: EP US)
B29D 30/0645 (2013.01 - EP US)

Citation (search report)
• [X] US 5853526 A 19981229 - LAURENT DANIEL [FR], et al
• [X] US 5522716 A 19960604 - URESHINO KASHIRO [JP]
• [X] EP 0529331 A1 19930303 - PIRELLI [IT]
• [X] US 4872822 A 19891010 - PIZZORNO AUGUSTO [IT]

Cited by
EP1932646A4; CN101372139A; US7661944B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 1036646 A2 20000920; EP 1036646 A3 20010321; EP 1036646 B1 20040512; DE 60010554 D1 20040617; DE 60010554 T2 20050519; ES 2219268 T3 20041201; JP 2000326330 A 20001128; JP 4323050 B2 20090902; US 6402491 B1 20020611

DOCDB simple family (application)
EP 00302088 A 20000315; DE 60010554 T 20000315; ES 00302088 T 20000315; JP 2000036263 A 20000215; US 52079100 A 20000308